

## **The Role of Foresight in Achieving Sustainable Development: The Model of Finland**

**KHETIB Sidi Mohamed Boumediène <sup>1</sup>**

POLDEVA Laboratory / PhD / Abu-Bakr Belkaid University-Tlemcen/  
Algeria  
khetib.s@yahoo.com

**ZEMRI Bouazza Elamine <sup>2</sup>**

POLDEVA Laboratory / PhD. Student / Abu-Bakr Belkaid University-  
Tlemcen/ Algeria  
bouazzaelamine.zemri@univ-tlemcen.dz

Received date: 04-03-2023, Accepted date: 31-03-2023, Publication date: 02-06-2023

### **Abstract:**

Foresight is a difficult 'art'. It is used to create a unified future vision. Developing foresight methodology and a forward-thinking attitude in Finnish government can serve as a model for other countries. This study provides an overview of the evolution of the Finnish foresight domain and its use as an innovative approach to achieving sustainable development. The results indicate that, the Finnish model's mentality towards foresight plays a crucial role in developing strategies and promoting progress in various economic, social, and environmental fields. The theoretical framework of foresight and the analysis of the future report 2013-2030 in Finland demonstrate the importance of foresight for conscious and responsible future thinking. By learning from Finland's experience, other nations can adopt a similar approach to shaping a sustainable future.

**Keywords:** foresight, Finland model, sustainable development, strategies.

**Jel Classification Codes :** O21, O33, O38, Q56.

### **Introduction:**

The concept of foresight is a crucial element of human activity, encompassing the past, present, and future. It is an intricate process that involves several complex methodologies to ensure its effectiveness and reliability. In contemporary times, one of the critical directions for the economic policy of the

---

<sup>1</sup>Corresponding Author.

state is the foresight of innovative development. This approach enables the identification of priority areas and the evaluation of economic processes, crucial for the sustainable growth and development of a nation. Long-term development forecasts are formed using a system of expert assessment methods, which are called ‘insight’<sup>3</sup>. In Western countries, the use of foresight in economic policy-making is not a new concept, and many nations have made significant strides in this direction. Countries like Finland have distinguished themselves in the area of foresight with a robust education system and visionary politics that ensure their top position among European nations. The Finnish government's proactive approach and solutions-focused culture have contributed to the growth of foresight, institutes of futures studies, and educational support. This innovative political and foresight system has made finding answers simpler and established Finland as a leader in digital development and forward-thinking in the European Union.

Finland now features some of the most advanced foresight systems and a culture of thinking about the future. The growth of Finland's institutions and government's future-oriented mentality can serve as a fantastic model for other countries. For decades, Finland has been designing scenarios and scanning patterns. Institutional structures that support forward-thinking policy have existed since the late twentieth century. As a result of its high level of future awareness, Finland's visioning potential has risen. As a result, politicians have grown more ambitious, as seen by Finland's 2035 low-carbon roadmaps<sup>4</sup>.

Through the previous submission, the problems of this paper are reflected in the following fundamental question:

**How does Finland use foresight to create opportunities for achieving sustainable development?**

To answer the fundamental question, the main hypothesis:

H1: Foresight thinking has aided Finland's efforts to achieve sustainable development.

In light of this statement, the purpose of this paper is to highlight the concept of Finland as an example in terms of the most important strategies adopted in the use of the foresight process as a creative methodology and the knowledge of the most important results achieved by this system. Consequently, this research aims to address the importance of the foresight process in the development of long-term strategies, as well as the ability of foresight to achieve sustainable development, considering Finland's experience.

As a methodology to test the main hypotheses and link them to the answers to the main question, we utilize a quantitative technique to read different indicators that show the direction and level of the foresight system in Finland, as well as a descriptive-analytical approach to read various documents and processes that are used to advance economic policy and implement a future-oriented attitude.

---

<sup>3</sup> BAŠKARADA, S., SHRIMPTON, D. & NG, S. (2016). Learning through foresight. *Foresight*, 18, 414-433.

<sup>4</sup> MAJAVA, A., VADEN, T., TOIVANEN, T., JÄRVENSIVU, P., LÄHDE, V. & ERONEN, J. T. (2022). Sectoral low-carbon roadmaps and the role of forest biomass in Finland's carbon neutrality 2035 target. *Energy Strategy Reviews*, 41, 100836.

To answer the main question, this paper is divided into five sections: an introduction; a brief literature review; methodological approach; results and discussion; and a conclusion.

## **1. Theoretical Framework**

In this section, we define the notion of foresight and the history of this domain based on the literature.

### **1.1. Evolution of foresight domain:**

In Figure 1, we show the history of Foresight. Predicting the future before World War II was largely a matter of mysticism rather than science. However, the increase in economic, social, and scientific phenomena during the twentieth century led to a growing demand for a better understanding of the future. Foresight emerged in military thought, with scenario planning becoming a useful tool. The RAND Corporation pioneered new approaches to developing military strategies and better understanding new military technologies. During the post-World War II era, two scientific concepts, namely system thinking and futurology, gained significant influence<sup>5</sup>. Following the war, the emergence of scenario planning allowed a wider possibility for Foresight to play a more significant role in Futures Studies. Yet, as dialectic thinking and strategic management became more prominent in the 1980s, new methodologies for future research took their time to emerge. Just 20% of these approaches were created between 1980 and 2010<sup>6</sup>. This suggests the need for a revamp of traditional Foresight methods.

Recent developments in Foresight have focused on the creation of new, more effective methods for predicting the future. These methods often incorporate technological tools such as big data and machine learning algorithms to improve the accuracy of predictions. One such approach is the use of scenario building, which involves creating multiple scenarios that account for different possible futures. Another approach is the use of backcasting, which involves envisioning a desirable future and then working backwards to identify the steps necessary to achieve it<sup>7</sup>. Despite the potential of these new methods, Foresight still faces many challenges and limitations. One major challenge is the difficulty of predicting complex and unpredictable events, such as global pandemics or economic recessions. Another challenge is the potential for bias in decision-making based on Foresight analysis.

However, Foresight remains a critical tool for addressing global challenges such as climate change and economic inequality. By envisioning multiple possible futures and identifying the steps necessary to achieve a desirable outcome, Foresight can help to create more sustainable and equitable futures. Ultimately,

---

<sup>5</sup> KAIVO- OJA, J., MARTTINEN, J. & VARELIUS, J. (2002). Basic conceptions and visions of the regional foresight system in Finland. *foresight*.

<sup>6</sup> CAPORALE, L. H. (2003). Foresight in genome evolution: selection favors a certain amount of predictable variation in genomes, a capacity that protects populations. *American scientist*, 91, 234-241.

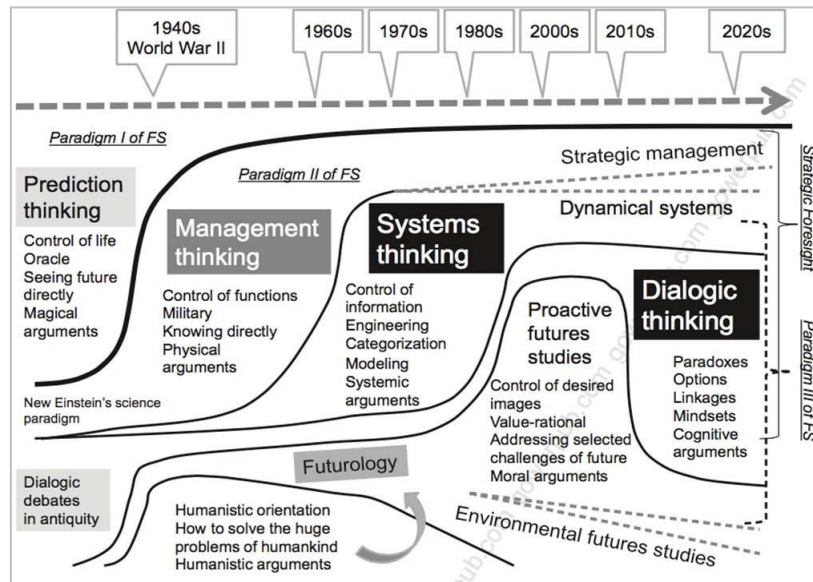
<sup>7</sup> KURKI, S. (2021). Towards National Systems Level Foresight? Understanding the role and future directions of citizen participation in the production of Finnish national foresight reports. *Futures*, 132, 102781.

Foresight is a powerful tool for enabling conscious and responsible future thinking, and for shaping a better world for generations to come<sup>8</sup>.

---

<sup>8</sup> MAY, G. H. (2009). Foresight and futures in Europe: an overview. *Foresight*.

**Figure.1.** Evolution of foresight domain



**Source:** Kuosa, Tuomo. (2011). Practicing Strategic Foresight in Government: Cases of Finland, Singapore and European Union.

## 1.2. Definition of foresight:

The forecast was developed with the assistance of the United States Army, the RAND Corporation (Research and Development), and the Douglas Aircraft Company. Following the stock market crisis and World War II, foresight was institutionalized as a component of social sciences and political decision-making in Europe, particularly in France, throughout the 1950s and 1960s<sup>9</sup>. Foresight is now defined as a systematic process in which participants seek to grasp future probability holistically and empirically. Because forecasting the future is difficult, it focuses on constructing alternative scenarios that give "some probability beyond linear projections can be assigned to emergent social processes"<sup>10</sup>. However, Foresight practitioners insist that the roots of the future exist in the present, so certain present variables must be studied systematically to gain a better understanding of possible futures and future possibilities. There are various definitions of foresight:

-Foresight at the EU level has been defined as the process of a participatory methodology based on collecting future information and developing medium- and long-term visions at making decisions that are implementable in the present<sup>11</sup>.

<sup>9</sup> KESKINEN, A. (1998). Participatory democracy and Civil society—transforming societal decision making in the information age. *Futu-publication*, 1, 98.

<sup>10</sup> LINDFORS, P., SOLANTAUS, T. & RIMPELÄ, A. (2012). Fears for the future among Finnish adolescents in 1983–2007: From global concerns to ill health and loneliness. *Journal of adolescence*, 35, 991-999.

<sup>11</sup> VOLKOVA, T., PORTNOVA, I. & DOMINIECE- DIASA, B. (2018). Strategic foresight: towards enhancing leadership capabilities and business sustainability.

- A group of research and studies that identifies issues that may arise in the future and forecasts the top priorities that will be needed to address them <sup>12</sup>.
- Foresight: “a systematic, participatory, future intelligence, gathering and medium to a long-term vision-building process aimed at enabling present-day decisions and mobilizing joint actions” <sup>13</sup>.
- Foresight is the ability to forecast potential developments in a certain field. Foresight frequently seeks to both examine different futures and promote discussion on the most desired futures in order to develop unified future perspectives.

Given this, foresight might be defined as the ability to anticipate future events and requirements, as well as the ability to comprehend future dimensions. We are asked to view of the future as something we can make or shape, rather than something inevitable and preset, by assisting in its construction rather than forecasting the future to disclose what is happening in it as if it were a predetermined issue.

### 1.3. Steps of foresight process:

In Figure 2, we show the phases of foresight. The process follows three phases, generally in chronological order. Phase One gathers the collection, assembling, and summarizing information that is already available (often information on trends, anticipated developments, brainstorming unexpected occurrences, etc.) and results in the creation of forward-looking knowledge. Phase Two involves the translation and interpretation of this knowledge to develop an understanding of its future consequences from a specific perspective. Phase Three entails assimilation and evaluation of this understanding, to produce a plan for commitment to action of a specific view<sup>14</sup>. In addition, each phase is more challenging, time-consuming, and difficult to measure than the one before it. These three stages of a successful foresight process will lead to decisions and actions that are different from those that would have been taken in the absence of the process.

**Figure.2.** The three overall phases of foresight

Phase One	Phase Two	Phase Three
Collection of information	Translation and Interpretation	Assimilation and commitment

**Source:** Magruk, A. (2015). The process of selection of the main research methods in foresight from different perspectives. *Business, Management and Education*, 13(2), 234-248.

Figure 3 depicts why foresight is vital. The dot-com bubble and its fall, as well as the Great Recession, show that we cannot expect a predictable, linear future. The most major impediments to innovation, according to the Survey of Innovation and Corporate Strategy, are uncertainty and risk, with mitigation

<sup>12</sup> CAPORALE, L. H. (2003). Foresight in genome evolution: selection favors a certain amount of predictable variation in genomes, a capacity that protects populations. *American scientist*, 91, 234-241.

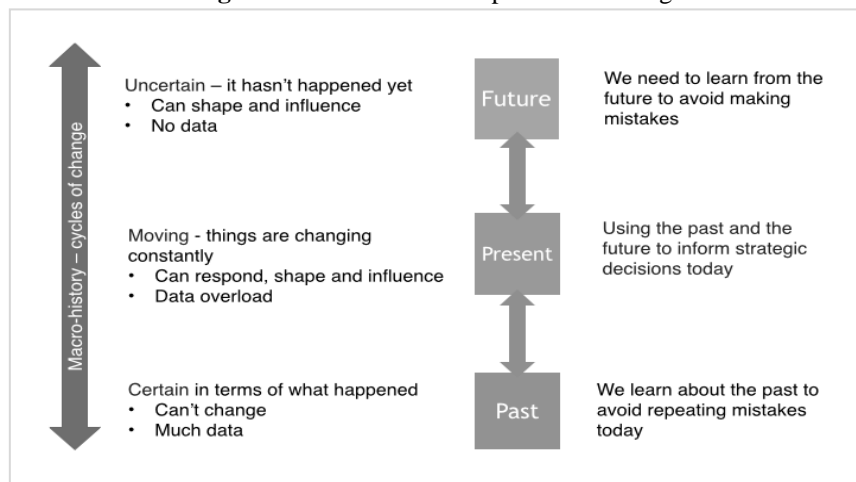
<sup>13</sup> PALONEVA, M. & TAKAMÄKI, S. (2021). Summary of sectoral low-carbon road maps.

<sup>14</sup> KAIVO- OJA, J., MARTTINEN, J. & VARELIUS, J. (2002). Basic conceptions and visions of the regional foresight system in Finland. *foresight*.

interventions having a low success rate. Foresight can help governments and corporations reduce uncertainty and risk, allowing them to solve highly complex, interconnected challenges. Although we cannot anticipate the future, we may learn about a number of possible outcomes that will assist us in better understanding potential problems and hazards. This allows firms to create a flexible, future-ready strategy that allows for a quick reaction to change. "The goal of futures methodology is to explore, create, and test both possible and desirable futures in order to improve decisions" <sup>15</sup>. It is crucial to recognize that future research is not a science, and that the findings are strongly reliant on both the methodologies utilized and the practitioners' abilities. Methodologies for futures research span from extremely qualitative to highly quantitative, and cross-referencing strategies increase foresight. As a result, foresight increases the likelihood of guiding the mind in new areas and making decisions based on desired outcomes<sup>16</sup>.

- Foresight is a value chain comprising information, knowledge, and understanding; understanding is what creates actual value. Effective foresight may lead to the creation of possibilities for long-term growth. Foresight involves testing existing notions about reality, as well as new ones, and these concepts are mirrored in the present to produce activities to adapt to and impact futures.

**Figure.3.** The three overall phases of foresight



Source: MCEWEN, L. (2014, October 4). *Strategic foresight*. available at:  
<https://www.laurenkmcewen.com/articles/2014/10/4/strategic-foresight>

## 2. Methodological Approach

### 2.1. The Finnish foresight system's organizations:

As a case study, we investigated the emergence of foresight capability in Finland and took a closer look at the participants of foresight in Finland. Then, we analyzed an empirical analysis of the written documents produced during the

<sup>15</sup> BAŠKARADA, S., SHRIMPSON, D. & NG, S. (2016). Learning through foresight. *Foresight*, 18, 414-433.

<sup>16</sup> NÉMETH, B. (2016). Strategic Foresight Process-Improvements for the Hungarian Ministry of Defense. Naval Postgraduate School Monterey United States.

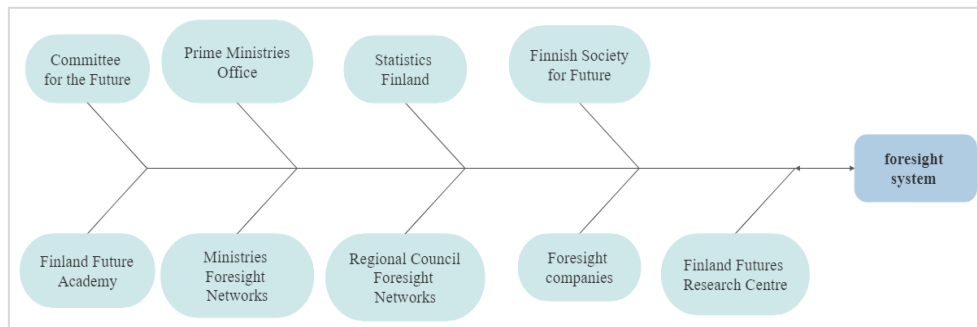


production of the Finnish Government's Future Report 2019–2023. In recent years, there have been several national foresight programs, typically carried out at the government level and carried out for a variety of reasons, including the promotion of national and industry competitiveness (including the UK, Germany, Netherlands, Finland, USA, and Japan). Although foresight is also possible for smaller business organizations, larger business organizations, especially those with a scientific and technical foundation, occasionally conduct their exercises as part of a longer-term strategy.

Finland's goal starting in the early 1990s was to create a national system for foresight. Groups that have shown interest in and involvement in this process include <sup>17</sup>. Finnish Society for Futures Studies (1980), Committee for the Future in the Parliament (1992), Turku-based Finland Futures Research Centre (1992), and Finland Futures Academy network (1998). In addition, The Academy of Finland (1947), Tekes-the Finnish Funding Agency for Technology and Innovation (1983), Sitra-the Finnish Innovation Fund (1992), and Units of regional Centres for Economic Development, Transport and the Environment <sup>18</sup>. The strong, multileveled structure of the foresight system in Finland is what makes it unique. The prime minister collects information from other ministries, regional centre cities, and ministries from other ministries.

In Figure 4, we show the participants of the foresight system in Finland. Participants are the following: Ministries Foresight Networks/Platforms (MFNs), Prime Minister's Office (PMO), the Committee for the Future (CF), Regional Council Foresight Networks (RFNS), the FFRC, the Finland Future Academy (FFA), the Finnish Society for Future (FSF), Finland Futures Research Centre.

**Figure.4.** The participants of the foresight system in Finland



**Source:** Nováky, E., & Monda, E. (2015). Futures studies in Finland. *Society and Economy*, 37(1), 31-48.

## 2.2. Finland Futures Academy (FFA):

Finland has been successful in establishing foresight education at universities and institutions. The Finland Futures Academy is a national network of universities administered by the FFRC that offers academic education and research

<sup>17</sup> KOSKIMAA, V. & RAUNIO, T. (2020). Encouraging a longer time horizon: the Committee for the Future in the Finnish Eduskunta. *The Journal of Legislative Studies*, 26, 159-179.

<sup>18</sup> TAPIO, P. & HEINONEN, S. (2018). Focused futures from Finland. *World Futures Review*, 10, 111-135.



programs in future studies. All of Finland's member universities offer the FFA study program. They build future-focused specialists via academic training for both undergraduate and graduate students. A variety of programs are available, including the MSc in Strategic Innovation and Future Creation and Interdisciplinary Sustainable Development. The Master's Program, Doctoral Program, and International Master's Program have all been offered since 2004<sup>19</sup>. The findings show how effective Finnish futures studies are in the classroom. More than 20000 credits were gained up till the end of 2011 owing to the involvement of over 6000 students and over 4000 lecturers in the courses<sup>20</sup>.

### **2.3. Committee for the future in the parliament:**

Following the collapse of the Finnish economy in 1992, the Committee for the Future was formed as a provisional entity. It was the first parliamentary committee in history to concentrate only on future issues. Martti Tiuri and Eero Paloheimo were important founding fathers of the Committee. When the Committee was granted permanent status in 1994, it quickly established its objectives and discussion themes, neither of which has altered considerably since then<sup>21</sup>.

Currently, the Committee is focused on offering comment on legislative initiatives. The Committee provided input on crucial legislative matters such as the construction of new universities, nuclear power plant licensing petitions, and legislation governing the manufacturing of genetically modified plants. Throughout each legislative session, the Committee should conduct a thorough analysis of Finland's current situation, including any relevant scenarios and/or futures maps. Rather than crafting legislation, the Committee for the Future's primary function is to investigate and analyze future possibilities, dangers, and concerning indicators. It helps to shape ideas, and Finnish society requires such services to prepare. The Committee focused on direct democracy, creative communications, and establishing participatory operational models during the current legislative term. They have participated in the activities of other international linkage organizations like the French Parliament and the EPTA (European Parliamentary Technology Assessment) in Brussels.

Part I: Finland and the Future of Europe (1996), Part II: Honest and Courageous: A Finland of Responsibility and Confidence (1993). (1997), A Finland of Balanced Development 2015 (2001), A Good Society for Persons of All Ages, a study on demographic development, demographic policy, and age structure preparedness (2004). Towards a Low-Emissions Finland, a climate and energy policy report (2009), the Finnish Government's Future Report 2013 (2030)<sup>22</sup>. The

<sup>19</sup> RÄKKÖLÄINEN, M. & SAXÉN, A. (2022). Pathway to the Transformative Policy of Agenda 2030: Evaluation of Finland's Sustainable Development Policy. *Transformational Change for People and the Planet*. Springer, Cham.

<sup>20</sup> LEHTONEN, H. & RÄMÖ, J. (2022). Development towards low carbon and sustainable agriculture in Finland is possible with moderate changes in land use and diets. *Sustainability Science*, 1-15.

<sup>21</sup> LUNDÉN, R. (2019). A Foresight and Strategic Development Proposals for Sport Business in Finland by 2025.

<sup>22</sup> Nováky, E., & Monda, E. (2015). Futures studies in Finland. *Society and Economy*, 37(1), 31-48.

study, titled "Can the Welfare Society Survive?" will be carried out in four stages. The first part will include expert opinions on the causes and effects of modern health and disease. In the second Part, experts will analyze the latest studies in connection with the most crucial topics. And in the third stage, a model of welfare in Finland of a future will be created with the aid of participatory methods. Every government in Finland produces a Futures Report. This report is compiled by the Committee and the government with the participation of the society. The Committee cooperates with other stakeholders (companies, universities, and citizens).

#### **2.4. Finland Futures Research Center:**

The Finland Futures Research Centre (FFRC) was established in 1920 when Turku University collaborated with other higher education institutions in the region to promote Turku as a center for world-class learning, research, and innovation. On January 1, 2010, the University of Turku and the Turku School of Economics amalgamated to become the new University of Turku<sup>23</sup>. This internationally competitive research institution is built on cutting-edge interdisciplinary research. The objective of the University is to promote free inquiry, scientific knowledge, and high-quality inquiry-based education. The FFRC was founded in 1992 as a special unit of the University of Turku specializing on futures studies and foresight. In 2011, the Center's researchers completed almost 60 research and development projects<sup>24</sup>. The Centre is appealing not only because of its significance and history, but also because of the research issues, technique, approach, vast number of publications, projects, and outcomes, all of which are extremely useful to experts in related subjects and, preferably, experts in other fields. The purpose of FFRC is focused on two critical issues: developing sustainability and providing the basis for human well-being.

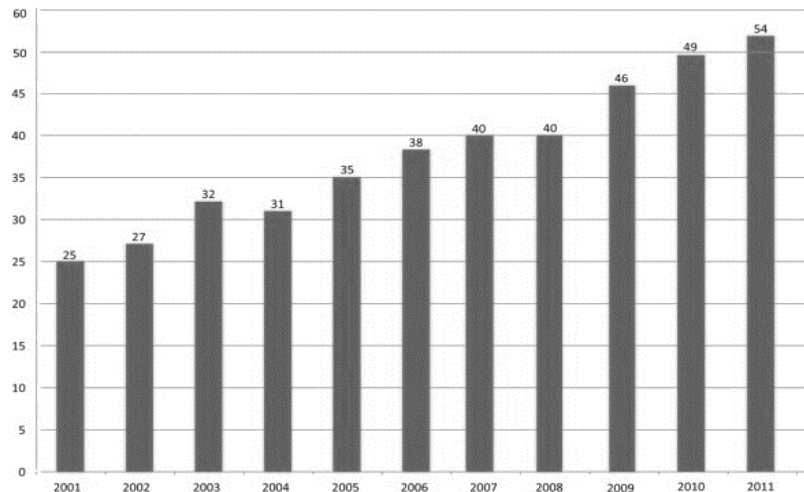
Techniques have always been an interest of FFRC since they are used and developed. FFRC created The Futures Clinique, a novel participatory and exploratory futures workshop technique. The earliest study approaches, which merged statistical procedures with future thinking, were trend extrapolation, data collecting, and philosophical discussion. The Delphi method was later employed.

In figure 5, We note from the chart that the number of FFRC projects carried out by the centre is increasing with time. However, the most important study is: The first research, 'Sustainable Technology - What is Sustainability?' analyzes how technical approaches to sustainability, techno-optimism, and techno-pessimism are related. The second research focused on "Transforming modern representative democracy through sophisticated telecommunications," with a focus on global teledemocracy growth and the development of new democratic political communication platforms (including televoting, deliberative polling, and electronic town meetings). The third research was about "Participatory democracy and Civil society - changing social decision-making in the era of the Internet".

<sup>23</sup> VOLKOVA, T., PORTNOVA, I. & DOMINIECE- DIASA, B. (2018). Strategic foresight: towards enhancing leadership capabilities and business sustainability.

<sup>24</sup> KIVINEN, M., EILU, P. & MARKOVAARA-KOIVISTO, M. (2021). Mineral futures in land-use planning: Foresight tools and case studies in Northern Finland. *Resources Policy*, 70, 101917.

**Figure.5.** The Number of FFRC Projects



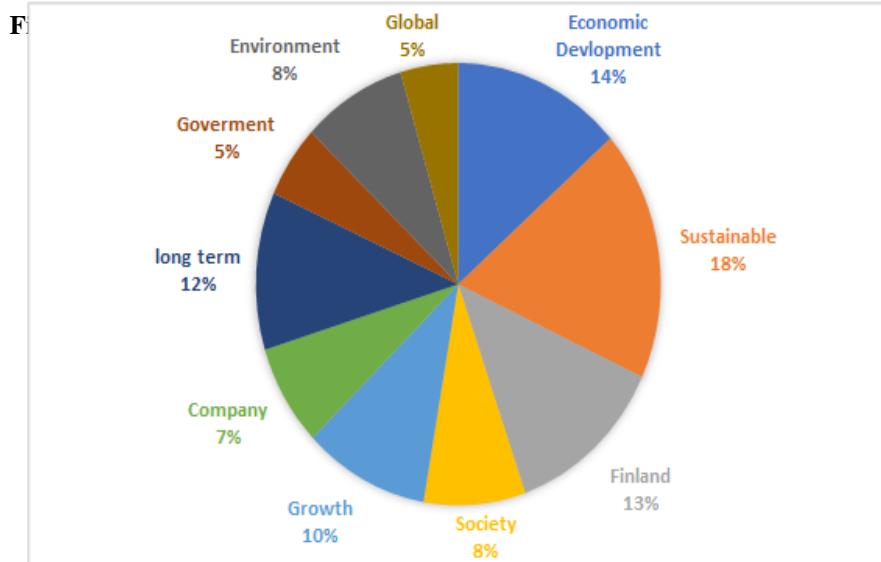
Source: FFRC website, available at: <http://ffrc.utu.fi/en/about/figures>

### 3. The Finnish Government's Future Report (2013 – 2030)

We investigated the development of the Finnish Government's future report, "Well-being via Sustainable Development," which was issued in October 2013. During each legislative term, the Finnish government publishes a report for the Parliament on Finland's future and its environment. We used qualitative analysis guided by text mining to trace the conceptual changes revealed at each stage of this procedure. We examine the establishment of shared views in a foresight system in this research. The themes vary from report to report, but their mission is to guarantee continuity throughout legislative terms by emphasizing issues that require future attention but do not come within the authority of any particular ministry<sup>25</sup>. Because it informs the future government program as well as ministry initiatives, the Future Report is closely tied to Finnish policymaking. The study looks ahead to 2030, with an emphasis on sustainable growth and well-being. The Government Report on the Future looks at Finland's long-term future problems and prospects, as well as the Government's common vision of the future we want to build. The study is based on recent research as well as the various policies and programs that the government has previously adopted, in addition to foresight work. The preliminary findings of the 'Sustainable Growth Model,' a parallel independent international research effort conducted in collaboration with Japan. The paper focuses on the long-term development drivers that will assure prosperity until 2030. It also focuses on the cutting edge of new activities that need to be addressed now and in the future. The Government Report on the Future, which focuses on well-being based on sustainable growth, includes decisions in principle that can be used to take concrete steps in various areas of society. Its purpose was to develop fresh perspectives on Finland's future directions and desired future in

<sup>25</sup> SIPIÄ, J., AMINOFF, P., AHO, K. J., HASU, J., IKÄHEIMO, J., LOUNASMERI, S. & MÄKYNEN, J. (2022). Vision 2030: Towards a responsible and competent ownership society.

2030, the 2013 government report on the future includes new aspects.



**Source:** Prepared by the authors.

In Figure 6, show the most important words from Finland's 2013 government Future report. In this study, the concept map is a representation of the number of the most important concepts mentioned in the report. Through different parts of the report and analysis, we can identify the most important words in the network of concepts. We also analyzed the context in which the concepts were presented and reviewed each phrase in which a concept was mentioned and gave a brief description of the concept's framing. The result of this analysis describes how different concepts changed during the process. the concepts of sustainability, growth, and well-being, as these were the issues of the future report Furthermore, there appears to be less emphasis on the future in the report's structures, but the report emphasizes on "allowing" beneficial progress, which is not captured by text mining. Where we find that the most frequently mentioned words are sustainability and environment.

#### 4. Results and Discussion

##### 4.1. Results:

According to the findings, Finland's national foresight system is now widely considered as one of the most advanced in the world, with strong integrated foresight functions across the public sector. In the public, commercial, and third sectors, Finland boasts some of the most advanced foresight systems and a futures-thinking culture. Finland has been generating scenarios and scanning patterns for decades. From the late twentieth century, institutional structures that support forward-thinking policy have existed. Finland's visioning potential has risen as a result of its high level of future awareness. As a result, politicians have become increasingly ambitious, as seen by Finland's low-carbon roadmaps for 2035.

Over the last ten years, the focus has of Finland shifted to achieving sustainable development, where we see that there is a great dependence on foresight and planning for the future. The role of foresight in Finland, as well as the importance of the FFRC and its long-term thinking the development of foresight, institutions of futures studies, and educational support all, reflect the former attribute. Finland's visionary politics and foresight system make it easier to find solutions. Finland has remarkable attributes such as competitive ability and inventiveness, cultural well-being, know-how, and process management in education and health care. A solid education in future studies and foresight has a substantial influence in a range of disciplines. FFRC courses are accessible in Finland and across the world. In 2012 and previously, the FFA's overseas partner universities were Corvinus University of Budapest in Hungary, Tamkang University in Taiwan, and the University of Alicante in Spain<sup>26</sup>. The Finnish government addresses the most pressing issues and pays special attention to new societal tasks, issues, and challenges. The programs aimed at finding new solutions were made possible through the collaboration of various sectors.

#### **4.2. Discussion:**

As mentioned in the results section, there was a notable Finland is an excellent example of a favorable situation since it has the world's top foresight education and employs future researchers in the legislature. Finland's foresight system and visionary politics are two of the numerous factors that ensure its distinctive traits and, as a result, its top position among European nations. Future developments are determined by the government's activities in the present, which are formed by their perceptions of current reality and desired future.

In other words, shared future views have the capacity to impact how the future unfolds. The systems approach to foresight thus considers not only a single foresight study as a system, but also the practice of foresight as part of a larger system. This means that foresight should be perceived as a continuous interaction between agents involved in anticipating the future, rather than as a separate foresight process. Furthermore, Finland is a pioneer in the foresight process, which is supported by the proactive, solutions-focused culture of the country. Multiple disciplines are impacted by the strong foresight education.

The Finnish government addresses the most critical issues and provides special regard to society's new duties, challenges, and difficulties. The projects aimed at identifying innovative solutions were born through the partnership of many industries. The growth of foresight, institutes of futures studies, and educational support are all manifestations of the former characteristic. Finland's innovative politics and foresight system make finding answers simpler. The combination of the creative economy and information society will determine future developments. In terms of digital development and forward-thinking, Finland leads the European Union countries. The government used its enormous power to implement the changes and influence the actors. Its actions are proactive, and its thinking is long-term.

---

<sup>26</sup> AHLQVIST, T. Foresight activities in Finland: actors, relations, and impacts on policy making. 6th International Conference and Workshop, Tokyo, 2015.

On the contrary, it is clear from the media, the national anthem, and everyday life in Algeria that the Algerian people frequently look to the past rather than the future. Foresight has not evolved sufficiently in the last 20 years. A growing number of young people want to pursue a career abroad (immigration). Perhaps this situation is related to the fact that the Algerian Parliament lacks a committee or political units dedicated to future studies. Within Algeria, there is no education about foresight neither the level of bachelor, master, or doctoral studies does not have a strong link to foresight. There is not even a party in the Algerian parliament that is interested in future-oriented thinking, proactivity, strong cooperation within society, solution-oriented thinking, and long-term thinking. If we take the Finnish mentality and experience in the field of foresight and amplified in Algeria, the qualities of Finnish thinking may lead us to a prosperous environment where future studies are recognized not only as planning but as a key to achieving sustainable development.

### Conclusion

This research emphasizes the crucial role of foresight and illustrates how other countries can learn from Finland's foresight process. Finland boasts exceptional qualities in areas such as competitiveness, creativity, cultural well-being, education, and healthcare management. Societal changes are shaped by various factors, including the environment, history, stakeholders' relationships, and the context of their operations. While every nation has its unique history, environment, and structure, all actors can influence societal changes to some extent. Thus, we provide general principles for developing foresight, using Finland as an example. Finland is a leader in forward-looking thinking among EU nations.

This study reveals that Finland has made significant progress in foresight methodology. The study shows that Finland has appropriately utilized foresight to achieve the goals of its economic project. This finding confirms our study's hypothesis, which links Finland's success in diversifying its economy to the clarity of its economic strategy and the appropriateness of its economic tool. The Finnish government's proactive and strategic approach has facilitated the implementation of changes and influenced various actors. Finland's futures studies institutions, combined with its forward-thinking politics and systems foresight methodology, have made it easier to find solutions.

The Finland model provides a set of general rules that enhance foresight's efficiency and align it with economic diversification goals. The Finnish mentality, which emphasizes proactivity and solution-oriented thinking, supports efficient process management, in which Finland is a pioneer. Strong futures studies reveal that education plays a crucial role in various fields. The Finnish government prioritizes the most pressing issues and devotes extra attention to addressing society's new tasks and problems. The collaboration of various sectors has enabled the development of systems aimed at finding new solutions. Finnish thought's characteristics enable the creation of an environment where foresight is valued not only in science but also as a tool for aiding parliamentary decision-making. These qualities include visionary politics and foresight systems, future-oriented thinking, proactivity, solution-oriented thinking, and long-term thinking.



This study recommends that countries learn from the Finnish experience and pay attention to technology as a vital tool for promoting foresight methodology. The Finnish government's strategy emphasizes swift reactions to changes, with multi-year plans in place to ensure flexibility and continuous environmental study to uncover new possibilities. Finland has established institutions and organizations to anticipate the future and find appropriate solutions. By adopting Finland's proactive, solution-oriented mentality and implementing foresight methodology, countries can better address societal challenges and achieve their economic goals.

Given these points, Can the Finnish experience in applying foresight be implemented in Algeria or other nations? Without a doubt, yes, is our response. When used in a different environment, these attributes may need to be modified, but combining them can aid in creating a more effective strategy. If they can, why we wouldn't?

#### References :

- AHLQVIST, T. Foresight activities in Finland: actors, relations, and impacts on policy making. 6th International Conference and Workshop, Tokyo, (2015).
- BAŠKARADA, S., SHRIMPTON, D. & NG, S. (2016). Learning through foresight. *Foresight*, 18, 414-433.
- CAPORALE, L. H. (2003). Foresight in genome evolution: selection favors a certain amount of predictable variation in genomes, a capacity that protects populations. *American scientist*, 91, 234-241.
- KAIVO- OJA, J., MARTTINEN, J. & VARELIUS, J. (2002). Basic conceptions and visions of the regional foresight system in Finland. *foresight*.
- KESKINEN, A. (1998). Participatory democracy and Civil society—transforming societal decision making in the information age. *Futu-publication*, 1, 98.
- KIVINEN, M., EILU, P. & MARKOVAARA-KOIVISTO, M. (2021). Mineral futures in land-use planning: Foresight tools and case studies in Northern Finland. *Resources Policy*, 70, 101917.
- KOSKIMAA, V. & RAUNIO, T. (2020). Encouraging a longer time horizon: the Committee for the Future in the Finnish Eduskunta. *The Journal of Legislative Studies*, 26, 159-179.
- KURKI, S. (2021). Towards National Systems Level Foresight? Understanding the role and future directions of citizen participation in the production of Finnish national foresight reports. *Futures*, 132, 102781.
- LEHTONEN, H. & RÄMÖ, J. (2022). Development towards low carbon and sustainable agriculture in Finland is possible with moderate changes in land use and diets. *Sustainability Science*, 1-15.
- LINDFORS, P., SOLANTAUS, T. & RIMPELÄ, A. (2012). Fears for the future among Finnish adolescents in 1983–2007: From global concerns to ill health and loneliness. *Journal of adolescence*, 35, 991-999.
- LUNDÉN, R. (2019). A Foresight and Strategic Development Proposals for Sport Business in Finland by 2025.
- MAJAVA, A., VADEN, T., TOIVANEN, T., JÄRVENSIVU, P., LÄHDE, V. & ERONEN, J. T. (2022). Sectoral low-carbon roadmaps and the role of forest biomass in Finland's carbon neutrality 2035 target. *Energy Strategy Reviews*, 41, 100836.
- MAY, G. H. (2009). Foresight and futures in Europe: an overview. *Foresight*.
- MILES, I. (2012). Dynamic foresight evaluation. *foresight*.



- NÉMETH, B. 2016. Strategic Foresight Process-Improvements for the Hungarian Ministry of Defense. Naval Postgraduate School Monterey United States.
- PALONEVA, M. & TAKAMÄKI, S. (2021). Summary of sectoral low-carbon road maps.
- RÄKKÖLÄINEN, M. & SAXÉN, A. 2022. Pathway to the Transformative Policy of Agenda 2030: Evaluation of Finland's Sustainable Development Policy. *Transformational Change for People and the Planet*. Springer, Cham.
- SIPILÄ, J., AMINOFF, P., AHO, K. J., HASU, J., IKÄHEIMO, J., LOUNASMERI, S. & MÄKYNEN, J. (2022). Vision 2030: Towards a responsible and competent ownership society.
- TAPIO, P. & HEINONEN, S. (2018). Focused futures from Finland. *World Futures Review*, 10, 111-135.
- VOLKOVA, T., PORTNOVA, I. & DOMINIECE- DIASA, B. (2018). Strategic foresight: towards enhancing leadership capabilities and business sustainability.